

REMARKS

The Applicant would first like the Examiner to note that in the Office Action Summary of the Office Action mailed November 21, 2006, the Examiner checked box 2(b) to state that the action was non-final, but in the Conclusion of the Office Action appearing on page 5, the Examiner states that the action is made Final.

The Examiner noted that there was a typographical error in claim 7, line 8, in paragraph 2 of the Office Action mailed November 21, 2006, and the Examiner will please note that that typographical error has been corrected by an appropriate amendment proposed under Rule 116 to claim 7. Claim 7 has been further amended to clarify the meaning of reversibility and to better distinguish the claimed invention over the cited prior art.

Referring to the rejection of Claims 7 and 8 under 35 U.S.C. § 103 (paragraphs 3 and 4 of the Office Action), the Examiner states that Kobashi discloses all the features of Claim 7 and 8 except that it does not disclose the relationship between the angle of the threads and the threaded bolt being reversible, but nevertheless it would have been obvious to an ordinary skilled man in the art to provide the threads of Kobashi with a high pitch as taught by Magnusson in order to provide the valve with ease of closing by a spring when the rotor is standing still.

Applicant believes that this reasoning is incorrect since Kobashi teaches in an opposite direction to what is taught by Magnusson, and that a skilled person would not therefore combine the teachings of Magnusson with Kobashi in view of arriving at the invention according to amended Claim 7, as explained below.

First, Kobashi does not teach a reversible actuator in the sense now defined in amended claim 7, but in fact teaches in the opposite direction. Clearly, Kobashi does not

seek to have a reversible actuator since the purpose of the actuator in Kobashi is to adjust an air by-pass valve for regulating idling speed without any need or consideration for a fail-safe function. Should the stepping motor fail, there is no disclosure in Kobashi to have the actuator move the valve to a closed position since this actuator merely has the function of adjusting idling speed. To the contrary, Kobashi specifically discloses that the closure of the valve should be avoided, as is apparent from the following passage (column 10, lines 32-34) from Kobashi: *"Furthermore, since the valve head 36 has not come into contact with the valve seat 19, there is no danger that the valve head 36 will freeze to the valve seat."*

Magnusson, however, teaches a fan wheel with threads having a high pitch such that when the drive is standing still, the fan wheel and sealing membrane are forced against the valve seat (see for example column 1, lines 62-66). Thus, Magnusson teaches in exactly the opposite direction to Kobashi. The non-reversibility of the screw thread actuator of Kobashi is further evidenced by Figure 2, where the screw thread portion 29 of the linear actuator resembles identically or quasi-identically the thread of the mounting bolts 13, which, in view of their assembly function, clearly must be non-reversible (otherwise the assembly would fall apart). This reading of Kobashi is further confirmed by the purpose and nature of the coils spring 39, which is simply to apply a biasing force on the valve shaft in order to take up play in the screw nut system and to avoid backlash and to precisely control the cross-section area of the annular air flow passage (see column 10, lines 42-52).

As concerns the limitations of Claim 8, Applicant maintains that Kobashi does not disclose multiple threads, as claimed. Other than the fact that this would serve no purpose in Kobashi, the screw thread of the valve shaft resembles the screw thread of the depicted bolt 13, which clearly would not have multiple threads since this would increase the pitch and

increase the chances of the bolt coming loose, in contradiction to the intended purpose of such fixing bolts.

Concerning claims 9-12, Applicant is of the opinion that such claims describe limitations providing further advantageous features of the linear actuator not explicitly taught in the prior art, particularly in combination with the features of Claim 7 on which they depend, but in any event since Claim 7 is believed to be allowable the claims dependent thereon should also be allowable.

For all of these foregoing reasons, Applicant respectfully requests entry of the foregoing claim amendments under Rule 116, reconsideration of the present Application in light thereof, and in light of the foregoing remarks, and allowance of all Claims 7-12, as amended.

Respectfully submitted,

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